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09/929,865	08/14/2001	Eric Henderson	7211.01	8708

EXAMINER
FORMAN, BETTY J

ART UNIT	PAPER NUMBER
1634	

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DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/929,865	HENDERSON ET AL.	
	Examiner	Art Unit	
	BJ Forman	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13,17-19 and 21-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13,17-19 and 21-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

1. This action is in response to papers filed 8 November 2004 in which claims 1, 3, 4, 6, 8, 10, 17, 18, 21, 23-26, 28 were amended and claim 35 was added. All of the amendments have been thoroughly reviewed and entered.

The previous rejections in the Office Action dated 8 July 2004 are withdrawn in view of the amendments and Applicant's comments regarding non-movement of "R" in the Overbeck reference on page 11 of the response.

Claims 1-13, 17-19, 21-35 are under prosecution.

Information Disclosure Statement

2. This action is in response to papers filed 8 November 2004. It is noted that an IDS has been submitted in this case on 18 January 2005, over two months later than the papers filed 8 November. While the IDS has been received by the office, the IDS and any included references have not be scanned into the electronic file at the time of this action. Hence, the IDS, received long after Applicant's response have not been reviewed or considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 21-34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are amended to define independent movement of the translation stage and controller in the X and Y directions. During a conversation with Applicant's representative, passages at page 7, first paragraph, page 8, last paragraph and page 15 first full sentence forward were cited as providing support for the amended claims. The cited passages and the specification has been thoroughly reviewed. While the specification describes movement of the Z controller that is distinct (i.e. independent) from the movement of the X, Y controller or translation stage, the cited passages and specification do not teach or describe movement of the X, Y controller that is independent of the X,Y translation stage as newly claimed. Hence, the amendments introduce new matter into the claims.

MPEP 2163.06 notes "IF NEW MATTER IS ADDED TO THE CLAIMS, THE EXAMINER SHOULD REJECT THE CLAIMS UNDER 35 U.S.C. 112, FIRST PARAGRAPH - WRITTEN DESCRIPTION REQUIREMENT. *IN RE RASMUSSEN*, 650 F.2D 1212, 211 USPQ 323 (CCPA 1981)." MPEP 2163.02 teaches that "Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed...If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application." MPEP 2163.06 further notes "WHEN AN AMENDMENT IS FILED IN REPLY TO AN OBJECTION OR REJECTION BASED ON 35 U.S.C. 112, FIRST PARAGRAPH, A STUDY OF THE ENTIRE APPLICATION IS OFTEN NECESSARY TO DETERMINE WHETHER OR NOT "NEW MATTER" IS INVOLVED. *APPLICANT SHOULD THEREFORE SPECIFICALLY POINT OUT THE SUPPORT FOR ANY AMENDMENTS MADE TO THE DISCLOSURE*" (emphasis added).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 21, 34-35 are rejected under 35 U.S.C. 102(a) as being anticipated by Hong et al (Science, 9 June 2000, 288: 1808-181811).

Regarding Claim 21, Hong discloses an apparatus comprising a base, a Z controller (X-stepper motor counter, (page 1809, middle column), a deposition probe attached to the Z controller, a loading substrate couple to the base a moveable relative to the probe in an X-Y plane (i.e. ink well on X-Y-Z translation stage, page 1809, first column) and a deposition substrate coupled to the base an moveable relative to the probe in an S-Y plane (page 1809, scheme 1).

This rejection is based on the new matter rejection above wherein it is stated that independent movement of the translation stage and controller are deemed new matter.

Regarding Claim 34, Hong discloses an apparatus comprising a base, a Z controller (X-stepper motor counter, (page 1809, middle column), a deposition probe attached to the Z controller, a loading substrate couple to the base a moveable relative to the probe in an X-Y plane (i.e. ink well on X-Y-Z translation stage, page 1809, first column) and a deposition substrate coupled to the base an moveable relative to the probe in an S-Y plane (page 1809, scheme 1) and humidity controller (page 1808, right column).

This rejection is based on the new matter rejection above wherein it is stated that independent movement of the translation stage and controller are deemed new matter.

Regarding Claim 35, Hong discloses an apparatus comprising a base, a Z controller (X-stepper motor counter, (page 1809, middle column), a deposition probe attached to the Z controller, a loading substrate couple to the base a moveable relative to the probe in an X-Y plane (i.e. ink well on X-Y-Z translation stage, page 1809, first column) and a deposition substrate coupled to the base an moveable relative to the probe in an S-Y plane (page 1809, scheme 1).

7. Claims 1, 2, 7, 8, 10, 17, 21, 22, 27, 28, 30 and 35 are rejected under 35 U.S.C. 102(a) as being anticipated by Leighton et al (WO 99/44063, published 2 September 1999).

Regarding Claim 1, Leighton et al disclose an apparatus comprising a base (100, page 13, line 23), a Z controller (punch apparatus, 140, page 13, line 31) a deposition probe removably coupled to the Z controller so that deposition probe is positioned along the Z axis (142/144, stylet and stylet drive), an X,Y controller coupled to the base selectively positionable in an X-Y plane, independent of the Z controller (page 13, lines 23-24) and having a deposition substrate coupled thereto (recipient container, page 13, line 26) and a translation stage coupled to the base selectively positionable in an X-Y plane (page 13, lines 23-24) and having a loading substrate attached thereto (donor container, page 13, line 27 and Fig. 13-17).

Regarding Claim 2, Leighton et al disclose the apparatus further comprising a control computer (page 14, lines 3-4).

Regarding Claim 7, Leighton et al disclose the apparatus wherein the loading substrate comprises deposition material (i.e. tissue specimen, page 13, line 28).

Regarding Claim 8, Leighton et al disclose the apparatus further comprising an optic microscope coupled to the base (page 15, lines 6-7).

Regarding Claim 10, Leighton et al disclose the apparatus wherein the probe comprise a tip (stylet 144).

Regarding Claim 17, Leighton et al disclose an apparatus comprising a Z controller (punch apparatus, 140, page 13, line 31) a deposition probe comprising a tip (stylet 144) removably coupled to the Z controller so that deposition probe is positioned along the Z axis (142/144, stylet and stylet drive), an X,Y controller coupled to the Z controller and movable independent of the Z controller a deposition substrate coupled the X,Y controller (recipient container, page 13, line 26) selectively moveable between a first and second position under the tip via the X,Y controller (page 13, lines 23-page 14, line 28 and Fig. 13-17).

The following rejection of Claims 21, 22, 27, 28 and 30 are based on the new matter rejection stated above.

Regarding Claim 21, Leighton et al disclose an apparatus comprising a base (100, page 13, line 23), a deposition probe removably coupled to the base (142/144, stylet and stylet drive), an X, Y translation stage coupled to the base selectively positionable along an X axis and Y axis (page 13, lines 23-24) and having a loading substrate attached thereto (donor container, page 13, line 27) and an X, Y controller coupled to the base selectively positionable in an X-Y plane, independent of the Z controller (page 13, lines 23-24) and having a deposition substrate coupled thereto (recipient container, page 13, line 26) and Fig. 13-17).

Regarding Claim 22, Leighton et al disclose the apparatus further comprising a control computer (page 14, lines 3-4).

Regarding Claim 27, Leighton et al disclose the apparatus wherein the loading substrate comprises deposition material (i.e. tissue specimen, page 13, line 28).

Regarding Claim 28, Leighton et al disclose the apparatus further comprising an optic microscope coupled to the base (page 15, lines 6-7).

Regarding Claim 30, Leighton et al disclose the apparatus wherein the probe comprise a tip (stylet 144).

Regarding Claim 35, Leighton et al disclose an apparatus comprising a base (100, page 13, line 23), a Z controller (punch apparatus, 140, page 13, line 31) a deposition probe removably coupled to the Z controller so that deposition probe is positioned along the Z axis (142/144, stylet and stylet drive), an X,Y controller coupled to the base selectively positionable in an X-Y plane, independent of the Z controller (page 13, lines 23-24) and having a deposition substrate coupled thereto (recipient container, page 13, line 26) and a translation stage coupled to the base selectively positionable in an X-Y plane (page 13, lines 23-24) and having a loading substrate attached thereto (donor container, page 13, line 27 and Fig. 13-17).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-13, 17-19, 21-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mirkin et al (U.S. Patent No. 6,635,311, filed 5 January 2000) and Hong et al (Science, 9 June 2000, 288: 1808-1811) as taught by Hohn et al (U.S. Patent No. 5,150,392, issued 22 September 1992).

Mirkin et al and Hong et al are co-inventors and co-authors of the cited references. Both references describe very similar nanoplotters and differ only in the details discussed in each reference.

Mirkin et al teach a nanoplotter device comprising a deposition pin (AFM), a series of wells (i.e. loading substrate) comprising patterning compounds and rinsing solutions, and an adjacent substrate (deposition substrate) on which the patterning compounds are deposited (e.g. Column 11, lines 26-41) comprising a humidity controller (Column 14, lines 22-28) using a nanoplotter for deposition (Column 11, lines 26-41) providing 10nm resolution (Column 22, lines 52-60). Hong et al further describes their apparatus as comprising an X-Y translation stage (page 1808, last column-page 1809-first column) and Z controller (page 1809, middle column).

While both Mirkin and Hong suggest independent control of the X-Y translation and Z controller, they do not specifically teach independence. However, independent control of Z axis movement for AFM pins was well known in the art at the time the claimed invention was made as taught by Hohn et al who teach that independent control of the AFM pin provides precise control of the gap between the pin and substrate thereby increasing accuracy (Column 5, lines 35-54). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the Z-control of Hohn et al to the apparatus of Mirkin and Hong for the expected benefit of increased accuracy as taught by Hohn et al (Column 5, lines 35-54 and Abstract).

Regarding Claim 2, Mirkin et al teach computer control ((Column 14, lines 22-28 and Column 22, line 61-Column 23, line 5) and Hong teaches computer control (page 1808, left column, last paragraph, and page 1809, lines 18-20).

Regarding Claim 3, Mirkin et al teach the apparatus comprising a humidity controller (Column 14, lines 22-28) and Hong teaches the apparatus comprising a humidity controller (page 1808, last column).

Regarding Claim 4, Mirkin et al and Hong et al both teach regulates/controller humidity and Mirkin et al teaches humidity measurements are accurate to $\pm$ 5% which suggests computerized control. It would have been obvious to one of ordinary skill in the art

at the time the claimed invention was made to computer control the humidity in the apparatus of Mirkin for the obvious benefit of obtaining the precise control they desire.

Regarding Claim 5, Mirkin et al teach 200 nm spatial resolution (Column 16, lines 48-50).

Regarding Claim 6, Mirkin et al teach 20 nm spatial resolution (Column 16, lines 48-50).

Regarding Claim 7, Mirkin et al teach the loading substrate comprising deposition materials (Column 11, lines 16-29 and Example 1) and Hong teach the loading substrate comprising deposition materials (page 1809, left column).

Regarding Claim 8, Hong et al teach an optical microscope coupled to the base (page 1809, middle column and scheme 1).

Regarding Claim 9, Mirkin et al teach a force feedback monitor i.e. lateral force detector (Column 3, lines 50-56) and Hong teaches the apparatus comprising a force feedback monitor (abstract).

Regarding Claim 10, Mirkin et al teach the probe comprises a tip i.e. AFM tip (Column 4, lines 55-67) Hong et al teach the probe comprises a tip (Abstract).

Regarding Claim 11, Mirkin et al teach the apparatus comprising a humidity controller for controlling humidity around the tip (Column, lines 25-40 and Column 14, lines 22-28) and Hong teaches the apparatus comprising a humidity controller (page 1808, last column).

Regarding Claim 12, Hong et al teach the apparatus comprising a Z-stepper motor (page 1809, middle column) wherein movements of the apparatus are computer controlled (page 1808, left column, last paragraph, and page 1809, lines 18-20). This clearly suggests the Z-stepper motor is computer controlled utilized its program for control (e.g. control card). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to utilize a computer control card to control the Z-stepper motor of Hong et al. One

of ordinary skill in the art would have been motivated to do so to thereby control Z-axis movement utilizing the program designed for its control.

Regarding Claim 13, Mirkin et al teach the apparatus further comprising a dry gas source and gas flow monitor (Column 19, lines 16-34) and ozone for cleaning (Column 5, lines 40-44).

Regarding Claim 17, Mirkin et al teach a nanoplotter device comprising a deposition pin (AFM), a series of wells (i.e. loading substrate) comprising patterning compounds and rinsing solutions, and an adjacent substrate (deposition substrate) on which the patterning compounds are deposited (e.g. Column 11, lines 26-41) comprising a humidity controller (Column 14, lines 22-28) using a nanoplotter for deposition (Column 11, lines 26-41) providing 10nm resolution (Column 22, lines 52-60). Hong et al further describes their apparatus as comprising an X-Y translation stage (page 1808, last column-page 1809-first column) and Z controller (page 1809, middle column).

While both Mirkin and Hong suggest independent control of the X-Y translation and Z controller, they do not specifically teach independence. However, independent control of Z axis movement for AFM pins was well known in the art at the time the claimed invention was made as taught by Hohn et al who teach that independent control of the AFM pin provides precise control of the gap between the pin and substrate thereby increasing accuracy (Column 5, lines 35-54). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the Z-control of Hohn et al to the apparatus of Mirkin and Hong for the expected benefit of increased accuracy as taught by Hohn et al (Column 5, lines 35-54 and Abstract).

Regarding Claim 18, Mirkin et al teach the apparatus comprising a force feedback monitor i.e. lateral force detector (Column 3, lines 50-56) and comprising a humidity controller for controlling humidity around the tip (Column, lines 25-40 and Column 14, lines 22-28) and Hong teaches the apparatus comprising a force feedback monitor (abstract) and a humidity

controller (page 1808, last column) wherein the apparatus is computer controlled (page 1808, left column, last paragraph, and page 1809, lines 18-20).

Regarding Claim 19, Mirkin et al teach the apparatus comprising ozone for cleaning (Column 5, lines 40-44).

Regarding Claim 21, Mirkin et al teach a nanoplotter device comprising a deposition pin (AFM), a series of wells (i.e. loading substrate) comprising patterning compounds and rinsing solutions, and an adjacent substrate (deposition substrate) on which the patterning compounds are deposited (e.g. Column 11, lines 26-41) and Hong et al teach an apparatus comprising a base, a Z controller (X-stepper motor counter, (page 1809, middle column), a deposition probe attached to the Z controller, a loading substrate couple to the base a moveable relative to the probe in an X-Y plane (i.e. ink well on X-Y-Z translation stage, page 1809, first column) and a deposition substrate coupled to the base an moveable relative to the probe in an S-Y plane (page 1809, scheme 1).

Mirkin teach the pin is positioned over the loading substrate and then positioned over the deposition substrate (Column 11, lines 26-41) and Hong the pin is positioned over the loading substrate and then positioned over the deposition substrate (page 1809, left column and scheme 1). Hence, they both teach independent positioning of the loading substrate and deposition substrate. While they do not specifically teach the loading substrate is positionable independently of the deposition substrate, based on the lack of description of the independent positioning, it is unclear whether the independent positioning requires any structural elements. Because they both teach independent positioning, they teach the claimed apparatus as defined by the specification.

Regarding Claim 22, Mirkin et al teach computer control ((Column 14, lines 22-28 and Column 22, line 61-Column 23, line 5) and Hong teaches computer control (page 1808, left column, last paragraph, and page 1809, lines 18-20).

Regarding Claim 23, Mirkin et al teach the apparatus comprising a humidity controller (Column 14, lines 22-28) and Hong teaches the apparatus comprising a humidity controller (page 1808, last column).

Regarding Claim 24, Mirkin et al and Hong et al both teach regulates/controller humidity and Mirkin et al teaches humidity measurements are accurate to ± 5% which suggests computerized control. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to computer control the humidity in the apparatus of Mirkin for the obvious benefit of obtaining the precise control they desire.

Regarding Claim 25, Hong et al further describes their apparatus as comprising an X-Y translation stage (page 1808, last column-page 1809-first column) and Z controller (page 1809, middle column).

While both Mirkin and Hong suggest independent control of the X-Y translation and Z controller, they do not specifically teach independence. However, independent control of Z axis movement for AFM pins was well known in the art at the time the claimed invention was made as taught by Hohn et al who teach that independent control of the AFM pin provides precise control of the gap between the pin and substrate thereby increasing accuracy (Column 5, lines 35-54). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the Z-control of Hohn et al to the apparatus of Mirkin and Hong for the expected benefit of increased accuracy as taught by Hohn et al (Column 5, lines 35-54 and Abstract).

Regarding Claim 26, Mirkin et al teach 20 nm spatial resolution (Column 16, lines 48-50).

Regarding Claim 27, Mirkin et al teach the loading substrate comprising deposition materials (Column 11, lines 16-29 and Example 1) and Hong teach the loading substrate comprising deposition materials (page 1809, left column).

Regarding Claim 28, Hong et al teach an optical microscope coupled to the base (page 1809, middle column and scheme 1).

Regarding Claim 29, Mirkin et al teach a force feedback monitor i.e. lateral force detector (Column 3, lines 50-56) and Hong teaches the apparatus comprising a force feedback monitor (abstract).

Regarding Claim 30, Mirkin et al teach the probe comprises a tip i.e. AFM tip (Column 4, lines 55-67) Hong et al teach the probe comprises a tip (Abstract).

Regarding Claim 31, Mirkin et al teach the apparatus comprising a humidity controller for controlling humidity around the tip (Column, lines 25-40 and Column 14, lines 22-28) and Hong teaches the apparatus comprising a humidity controller (page 1808, last column).

Regarding Claim 32, Hong et al teach the apparatus comprising a Z-stepper motor (page 1809, middle column) wherein movements of the apparatus are computer controlled (page 1808, left column, last paragraph, and page 1809, lines 18-20). This clearly suggests the Z-stepper motor is computer controlled utilized its program for control (e.g. control card). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to utilize a computer control card to control the Z-stepper motor of Hong et al. One of ordinary skill in the art would have been motivated to do so to thereby control Z-axis movement utilizing the program designed for its control.

Regarding Claim 33, Mirkin et al teach the apparatus further comprising a dry gas source and gas flow monitor (Column 19, lines 16-34) and ozone for cleaning (Column 5, lines 40-44).

Regarding Claim 34, Mirkin et al teach a nanoplotter device comprising a deposition pin (AFM), a series of wells (i.e. loading substrate) comprising patterning compounds and rinsing solutions, and an adjacent substrate (deposition substrate) on which the patterning compounds are deposited (e.g. Column 11, lines 26-41) further comprising a humidity controller (Column 14, lines 22-28) and Hong et al teach an apparatus comprising a base, a Z

controller (X-stepper motor counter, (page 1809, middle column), a deposition probe attached to the Z controller, a loading substrate couple to the base a moveable relative to the probe in an X-Y plane (i.e. ink well on X-Y-Z translation stage, page 1809, first column) and a deposition substrate coupled to the base an moveable relative to the probe in an S-Y plane (page 1809, scheme 1) and further comprising a humidity controller (page 1808, last column).

Mirkin teach the pin is positioned over the loading substrate and then positioned over the deposition substrate (Column 11, lines 26-41) and Hong the pin is positioned over the loading substrate and then positioned over the deposition substrate (page 1809, left column and scheme 1). Hence, they both teach independent positioning of the loading substrate and deposition substrate. While they do not specifically teach the loading substrate is positionable independently of the deposition substrate, based on the lack of description of the independent positioning, it is unclear whether the independent positioning requires any structural elements. Because they both teach independent positioning, they teach the claimed apparatus as defined by the specification.

Conclusion

10. No claim is allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (571) 272-0741. The examiner can normally be reached on 6:00 TO 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on (571) 272-0745. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information

about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

BJ Forman, Ph.D.
Primary Examiner
Art Unit: 1634
February 7, 2005